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# Eligibility

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**Any person may register an  
emission reduction**

**Under Wisconsin law, person means:**

# **All Types of Sources**

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- **Stationary Sources**
- **Mobile Sources**
- **Renewable Energy Projects**
- **Energy Efficiency Projects**
- **Carbon Sequestration Projects**
- **Anything else you can think of**

# **Eligibility Requirements (NR 437.03)**

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**Reductions must:**

- **not be required by law**
- **occur within Wisconsin**
- **result from one or more actions taken**
- **not have been registered by any other person**
- **equal or exceed the registration threshold.**

# *Eligible Gases and Air Contaminants*

**Table 1**

Emission Reduced	Registration Threshold
Greenhouse gases	25 tons per year CO <sub>2</sub> equivalent
Nitrogen oxides	1 ton per year
Sulfur dioxide	1 ton per year
Volatile organic compounds	1 ton per year
Fine particulate matter	1 ton per year
Carbon monoxide	1 ton per year
Lead and lead compounds	0.5 ton per year
Mercury and mercury compounds	1 pound per year

# **Greenhouse Gases**

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- **carbon dioxide**
- **methane**
- **nitrous oxide**
- **hydrofluorcarbons**
- **perfluorocarbons**
- **sulfur hexafluoride**
- **any other gas that traps heat in the atmosphere**

# **Retroactive**

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**VERs may be retroactively registered**

- GHGs back to 1991**
- Other pollutants back to 1994**

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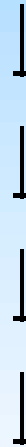
# Quantification



# The Emission Reduction

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Baseline Emissions



Reduced Emissions

# Quantification

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- **NR 437.06 - General Quantification Guidelines**
- **NR 437.04 - Specific Quantification Protocols**

# **General Guidelines**

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- **Reductions Shall Be Quantified As:**
  - **Mass Based (lbs. or tons per year) or**
  - **Rate Based (lbs or tons per unit of input or output)**
  - **or both**

# **General Guidelines**

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- **VERs and Baselines shall be quantified and reported on a calendar year basis**
- **Greenhouse Gas VERs shall be quantified and reported as carbon dioxide equivalents**

# General Guidelines

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- **Ozone precursor VERs may be quantified and reported for the 5-month ozone season (May-September) in terms of tons or lbs. per day averaged over the ozone season.**
- **VERs may be quantified and reported at the project level, the facility level, or statewide.**

# Mercury

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**VERs that result from mercury collection projects may be reported as pounds of mercury collected, stored and disposed.**

# Quantification Protocols

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**NR 437.04(2)(a):**

- 1. Source Emission Testing performed in accordance with NR 439.07 and 446.04.**
- 2. Continuous Emission Monitoring performed in accordance with NR 439.09 and 439.095.**
- 3. Mass Balance Estimates**

# **Published Protocols**

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- **Mostly quantification protocols**
- **One or two reporting protocols**
- **Apply to all types of sources**
- **For more detailed information on protocols:**
  - **Registry web site**
  - **Registry handbook**



# Emission Factors

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**Emissions = Source Activity Data x  
Emission Factor**

**e.g., 1,000 gallons of gasoline burned per  
year x 20 lbs CO<sub>2</sub> emitted per gallon  
burned = 20,000 lbs CO<sub>2</sub> emitted per  
year**

# **Alternative Protocols**

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**Must submit the following information**

- **A copy of the protocol**
- **Documentation of the accuracy and replicability of the protocol**
- **The name and address of the organization that developed the protocol**

**The Department shall maintain a list of the alternative protocols submitted**

# **No Protocol**

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**When no protocol is available ,  
the action may be registered  
without quantifying the  
emission reduction.**

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# **Baseline Determination**

# The Emission Reduction

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Baseline Emissions



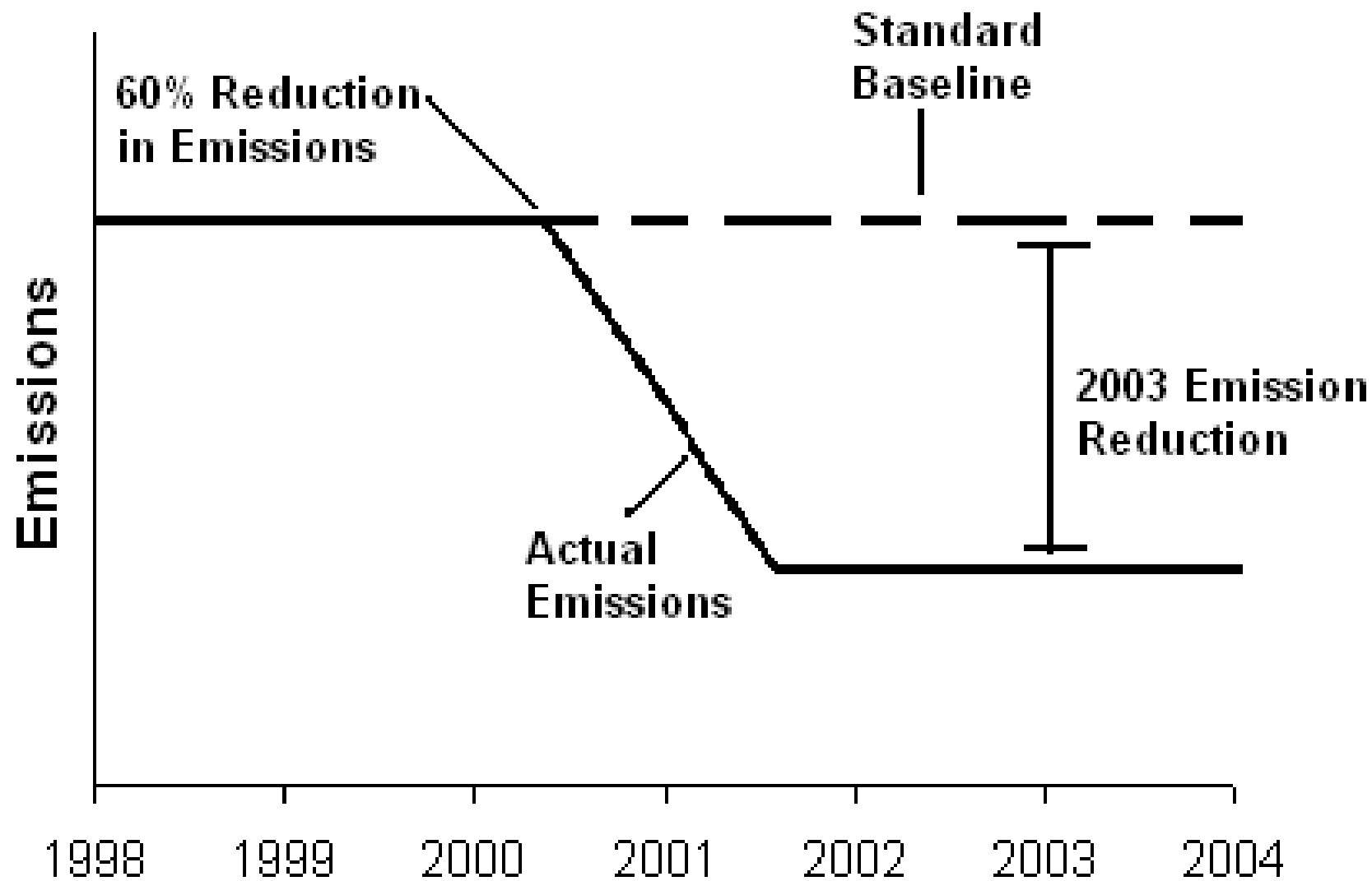
Reduced Emissions

# Standard Baseline

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**“Baselines for emission reduction actions shall be determined as the average annual actual emissions or emission rate for the 2 years immediately preceding the year in which the VER action is taken.”**

**NR 437.05(1)(a)**



# **Baseline for Avoided Emissions**

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**For Renewable Energy And Energy  
Efficiency Projects:**

**Baseline = the average annual emission rate  
for the Wisconsin generating system of  
the electric power generator whose  
emissions are avoided, given in terms of  
mass per unit of energy produced.**

**NR 437.05(1)(b)**



# **Carbon Sequestration Projects**

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**Baseline = the amount of carbon,  
quantified in terms of carbon dioxide  
equivalents, stored in the carbon  
sequestration project area at the  
beginning of the project.**

**NR 437.05(3)**

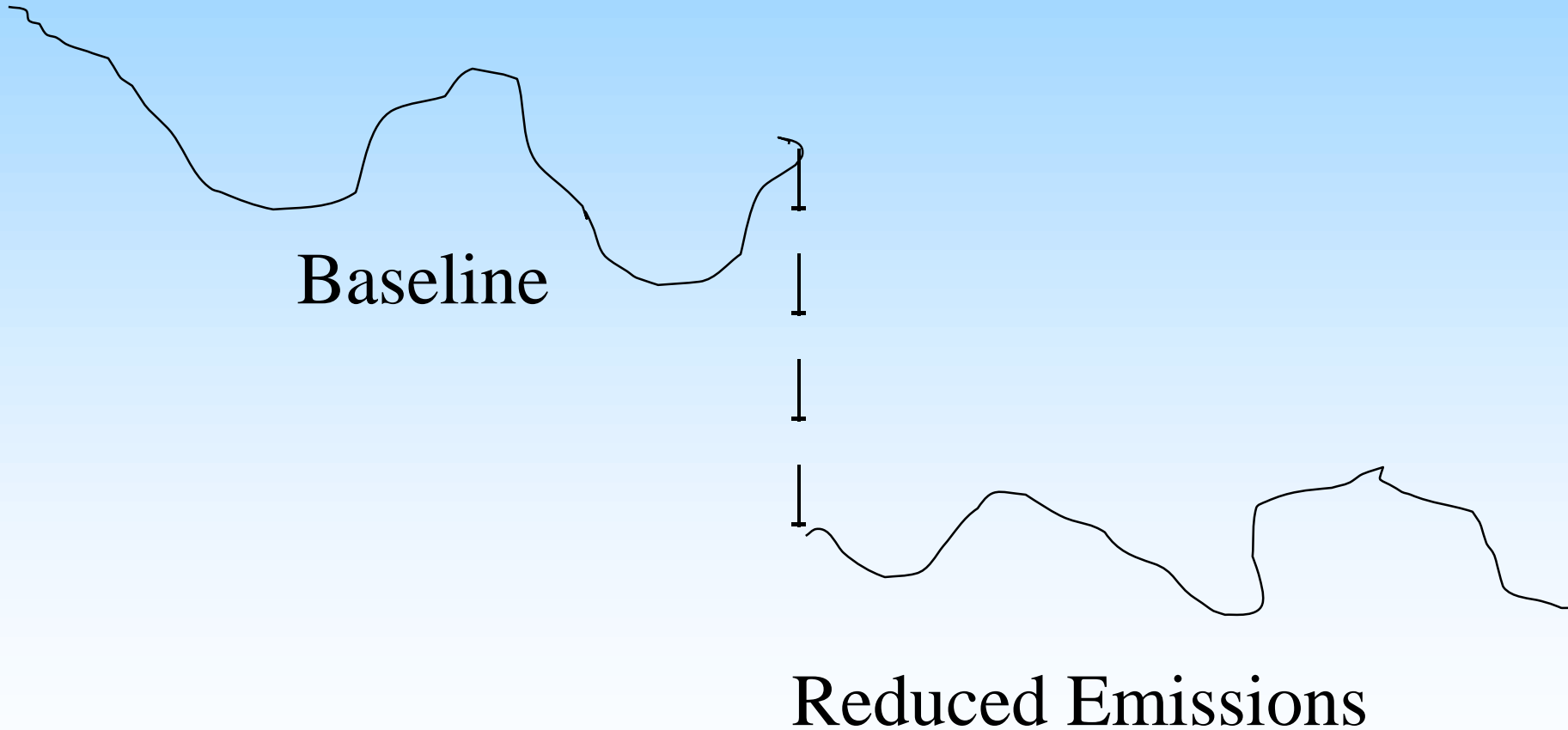
# Alternative Baselines

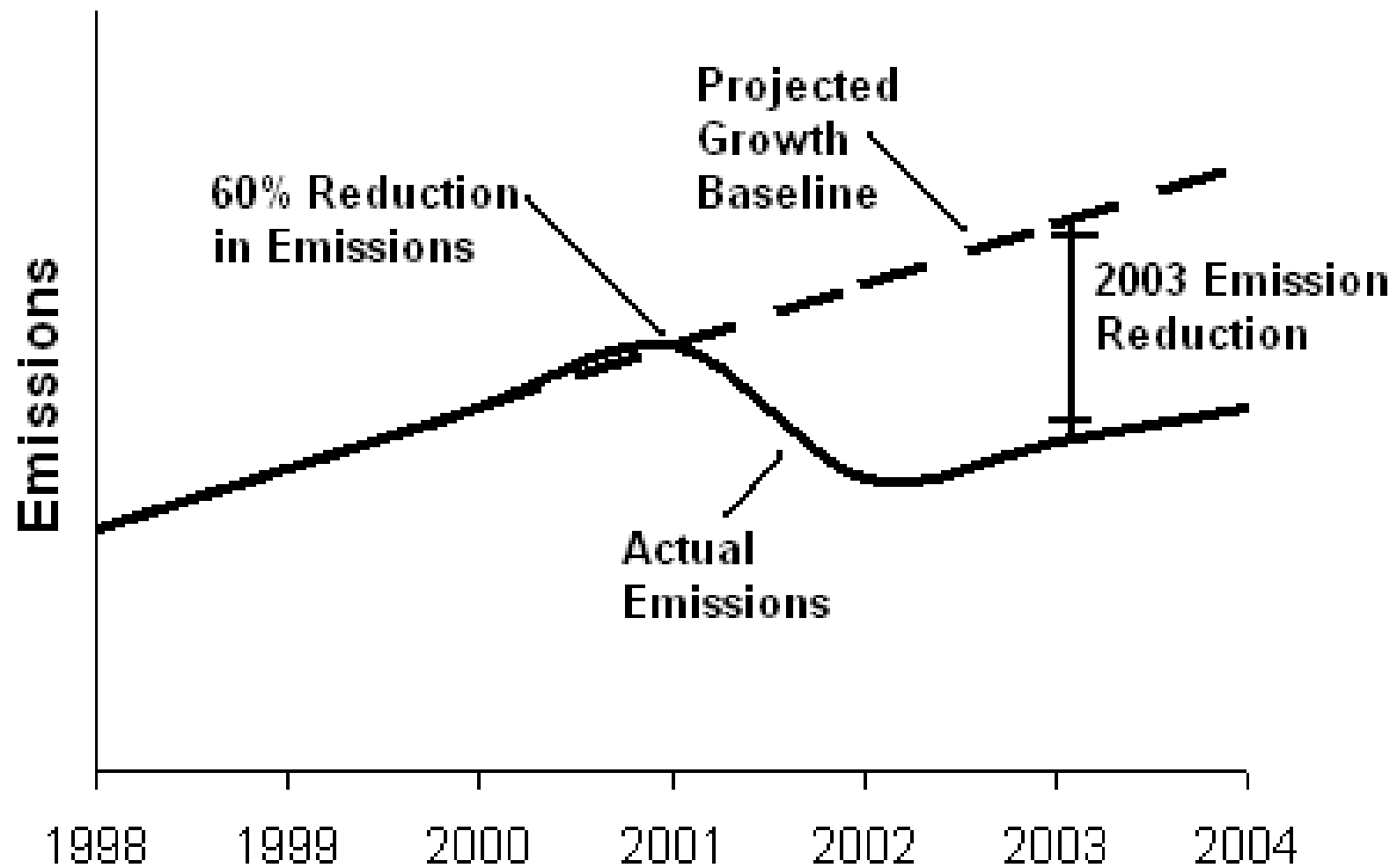
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- **Alternative years may be used if the standard baseline (two year average) is not representative**
- **No prior emissions**
  - use applicable emission limit
  - use industry or activity average

# The Emission Reduction

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# **No Baseline**

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**“When no quantification protocol is available to determine a baseline, the action may be registered without determining a baseline.”**

**NR 437.05(4)**

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# Verification

Or how do I know that my emission  
reduction is real?

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**No verification is required to  
register an emission reduction.**

**But...**

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**Verification is strongly  
encouraged.**



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**To verify means to establish the truth, accuracy, or reality of a voluntary emission reduction.**

# Tiers of Verification

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- Self audit
  - conduct and document QA and QC procedures
  - according to published standards (ISO 14010)
- Unaccredited third-party verification or audit
  - review of calculations, activity data, emission factors
- Accredited third-party verification
  - audit by a certified third-party verifier under a contractual relationship to registrant

# Rigorous Verification

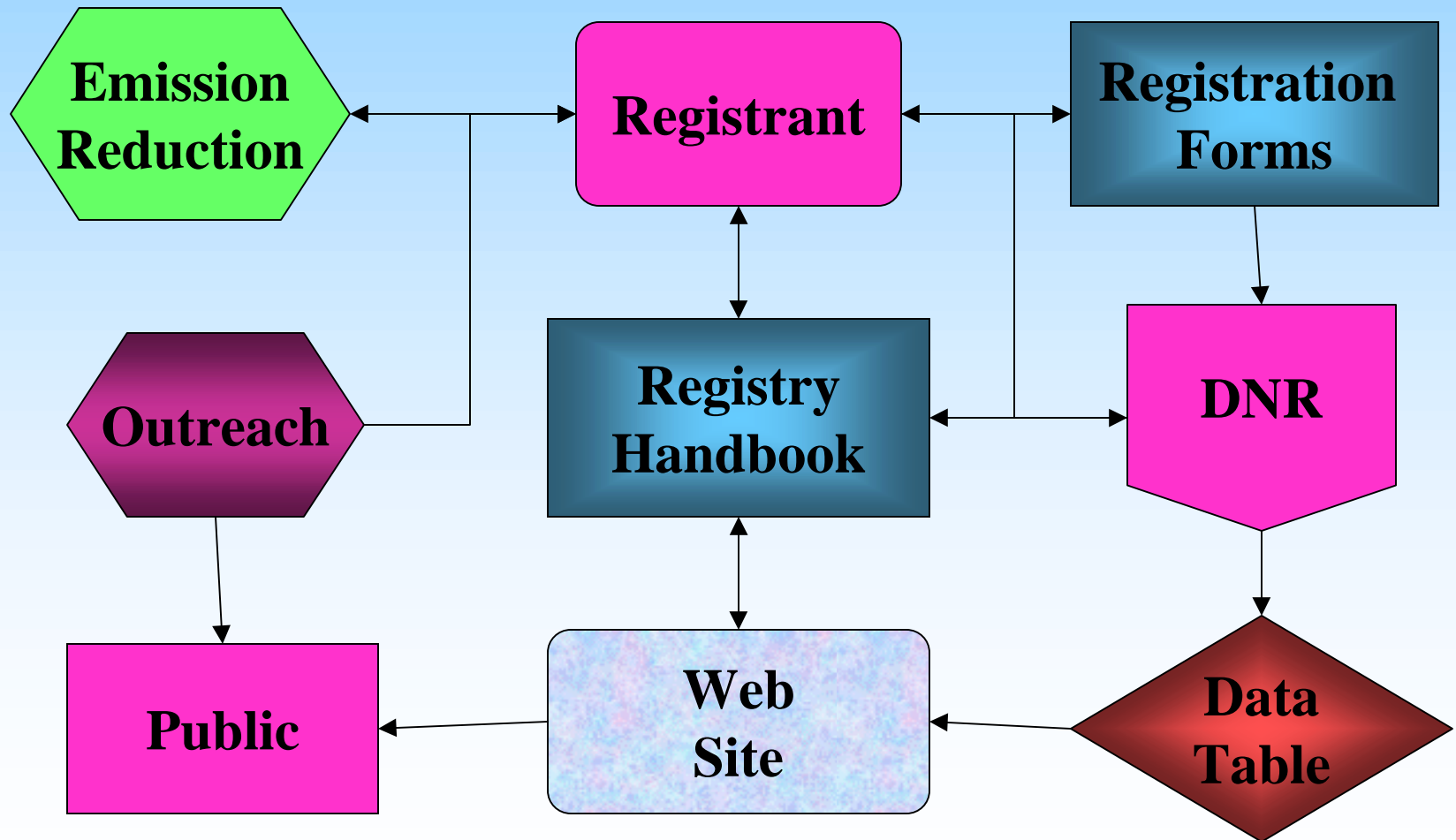
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- Verify ownership
- Conduct field inspection
- Verify emission factors
- Verify source activity data
- Check calculations
- Check baseline determination
- Ensure accurate reporting
- Ensure that all registry requirements are met

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# Registration

# How the Registry Works



# Registration

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- **Registration Update**
  - VER doesn't change
  - VER does change
- **Correction of Historical Data**

# **Contact Information**

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